LINCOLN CREOSOTE
LOUISIANA
EPA ID# LAD981060429

REGION 6
CONGRESSIONAL DISTRICT 04
Bossier Parish
Bossier City

Updated 6/3/97

Site Description

Location:

- The site is located in Bossier City, Bossier Parish, in northwestern Louisiana. The site is north of Shed Road, east of Benton Road, south of Montgomery Lane, and west of Airline Drive. Residential neighborhoods border the site to the north, northeast, south and west. Several apartment complexes are located immediately north and south of the site. Portions of the residential neighborhoods to the north and northeast and the apartment complex to the north make up the area of study for the offsite portion of the site.

Population:

- Bossier City (population 52,721 in 1990)
- Bossier City, Shreveport and Barksdale Air Force Base form a metropolitan area of over 275,000.

Setting:

- The former wood treatment plant encompasses approximately 20 acres. Lincoln Creosote is an abandoned wood treatment facility that was operated from approximately 1935 to 1969 by several different owners and operators. The amount of the surrounding neighborhood to be included as a part of the site is not yet determined.

Hydrology:

- The most shallow ground water at the Lincoln Creosote site occurs within the sand and gravel layers of the Red River Alluvium. The water levels at the Lincoln Creosote site range from about 6.0 to 7.5 feet below ground surface. However, the ground water is reported to be partially confined below a 20-foot thick surficial clay unit and actual depth to water in the alluvial aquifer may be deeper than observed in the on site monitoring wells. Ground water was shown to flow in an easterly direction in the shallow alluvial water-bearing zone.

- The Lincoln Creosote site is within the Red River Drainage Basin. The Red River is about 0.4 miles west of the site. The Bossier City Area is drained almost entirely by the Red River and its extensive network of small tributaries. The tributaries eventually flow into the river to the southeast due to the natural and man made levees along the river. Drainage is poor and slow due to the flat topography.

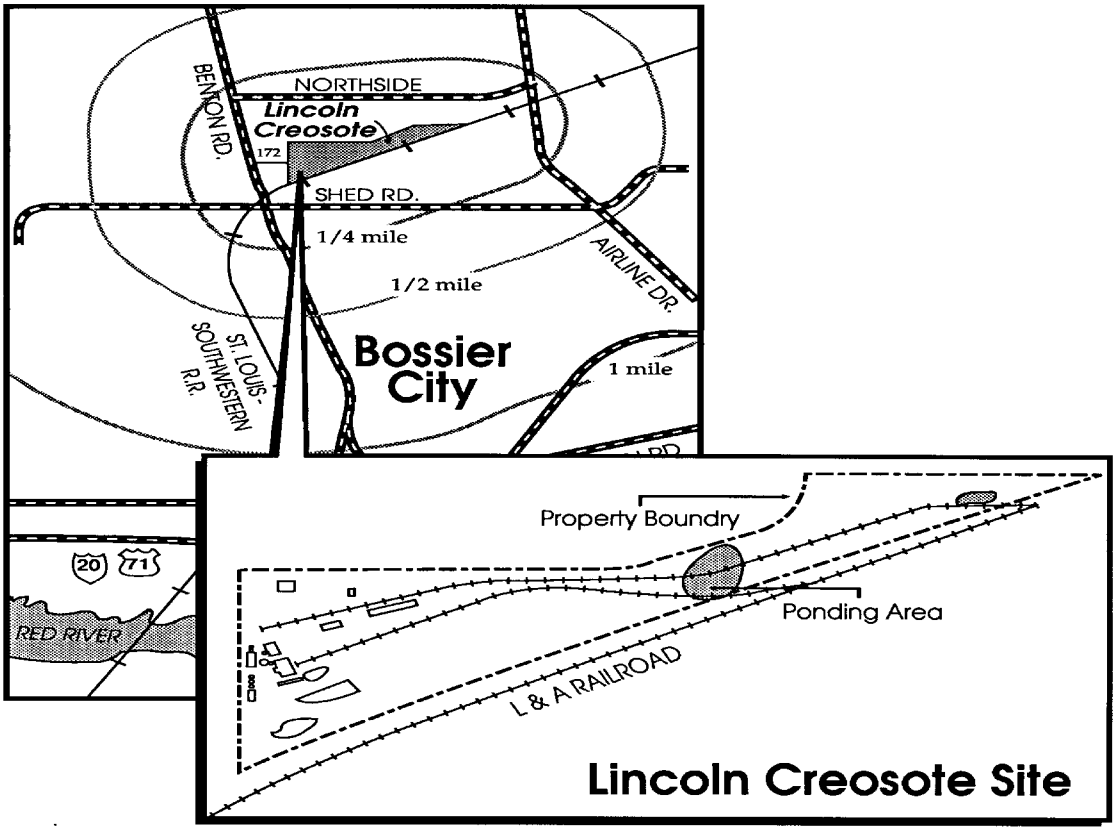
Wastes and Volumes

- Treatment processes for the plant included the use of creosote, pentachlorophenol (PCP), and chromated copper arsenate (CCA). The contaminants of concern are the creosote-related polycyclic aromatic hydrocarbons (PAHs) or semivolatile organic compounds, PCP, chromium, copper, and arsenic.

Site Assessment and Ranking

NPL LISTING HISTORY
Site HRS Score: 33.05
Proposed Date: 1/18/94
Final Date:
NPL Update: No.

Site Map and Diagram



The Remediation Process

Site History:

- The site is an abandoned wood treatment facility operated from approximately 1935 to 1969 by several different owners and operators.
- From 1935 to 1950, the site was operated by the Lincoln Creosote Co., and from 1950 to 1969 by the Joslyn Manufacturing and Supply Co. The Koppers Co. owned the site from 1969 to 1971, but never operated the facility. Since that time, the property has been sold a number of times in several parcels to different owners.
- During site operation, wood products such as railroad ties and utility poles were pressure-treated using creosote, CCA and PCP as preservatives.
- Upon closure of the facility, most buildings, tanks, impoundments and other structures were removed. Former process areas were covered with fill and revegetated.
- While much of the former facility has remained vacant and undeveloped, a mini-warehouse facility and a commercial building have been placed on the northwest portion of the site.
- In 1985, EPA conducted a site investigation and found high concentrations of creosote-related semi-volatile compounds in on site soil samples.
- A remedial investigation completed by the Joslyn Corp. with oversight of the Louisiana Department of Environmental Quality in 1989, showed significantly elevated concentrations of numerous creosote-related semi-volatile compounds, PCP, chromium, and arsenic in on site soils.
- Remedial activities at the wood treatment site began in February 1992, under State authority and included excavating and disposing of contaminated soils off site.
- During an expanded site investigation conducted by the EPA in March 1992, high concentrations of creosote-related semi-volatile organic compounds were detected in the soil samples collected on residential and commercial properties around the site.
- The site was proposed for the National Priorities List on January 18, 1994. In June 1994 EPA began an Expanded Sampling Investigation, Remedial Investigation, and Risk Assessment in the neighborhood surrounding the Lincoln Creosote site. Sampling was completed in late July. A draft report was submitted to EPA in January 1995.
- An Engineering Evaluation and Cost Analysis (EE/CA) Approval Memorandum was signed for a removal in a portion of the neighborhood surrounding the site on August 23, 1994. This will enable EPA and Joslyn Corporation to pursue a possible removal action in one portion of the neighborhood. The EE/CA and EE/CA Fact Sheet was released to the public on March 23, 1995. 30-day public comment period ended on April 21, 1995.

Health Considerations:

- Residents in the study area have been contacted regarding recommendations on potential long-term health risks by the Agency for Toxic Substances and Disease Registry (ATSDR).

- Soil samples from some residential properties in the area show elevated levels of PAHs which are a group of chemicals formed from the incomplete combustion of coal, oil, and other organic substances and are often found in creosote and tar-like substances.

- Exposure to these chemicals, at the levels found in the area, could cause a slightly increased risk of cancer.

Other Environmental Risks:

- There appears to be no significant environmental or ecological risk from the site as it lies in a highly urbanized area of Bossier City.

Record of Decision

There is no ROD completed to date. An Action Memorandum was completed for the non-time-critical removal action that addresses soil contamination in off site areas. A removal action was started in May 1996 that removed soils in the residential areas above 3 parts per million (ppm) total carcinogenic PAHs disposed of off-site. The residential areas were backfilled and restored completing the action in October 1996.

Signed:
Action Memo - August 17, 1995

Community Involvement

- Community Involvement Plan: Developed/implemented September 1994.
- Open houses and workshops: Open houses were held with the community on 1/94, 2/94, 4/94, 6/94, 7/94, 12/94, 9/95, 4/96.
- Original Proposed Plan Fact Sheet and Public Meeting: N/A.
- Original ROD Fact Sheet: N/A
- Milestone Fact Sheets: 3/93, 1/94, 3/95
- Citizens on site mailing list: 220

- Constituency Interest: People are especially concerned about the health of those residents who might be exposed to contamination from the site. Many residents are concerned about the possible long term effects the site could have on property values. Upon release of preliminary residential property sampling results, residents were divided between those relieved that their property did not appear to be contaminated, and those who were angered that the results were not positive.

- Site Repository:

1. Bossier Parish Library
   2206 Beckett Street
   Bossier City, Louisiana 71111
   318/746-1693

2. Louisiana Department of Environmental Quality
   7290 Bluebonnet
   Baton Rouge, Louisiana
   504/765-0487

3. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202
214/665-6444

Technical Assistance Grant

- Availability Notice: January 1994
- Letters of Intent Received: None
- Grant Award: N/A
- Current Status: No apparent community interest

Fiscal and Program Management

- **Remedial Project Manager:** John Meyer, 214-665-6742, EPA (6SF-LP)
- **State Contact:** Todd Thibodeaux (LDEQ)
- **Community Involvement Coordinator:** Olivia Balandran, 214-665-6584 (6SF-PO)
- **Attorney:** Jim Costello, 214-665-8045, EPA (6SF-DL)
- **State Coordinator (EPA):** Joe Massey, 214-665-7408, Mail Code: 6SF-LT
- **EPA Prime Contractor:** Roy F. Weston
- **PRP Prime Contractor:** ERM - Southwest

Cost Recovery:

- PRPs Identified: 4
- Viable PRP: 1

Present Status and Issues

- During the operation of the now-abandoned facility, waste water from the wood-treating process was discharged from the Lincoln Creosote facility into the natural drainage pathways surrounding the facility. It is suspected that the waste water included wood-treating wastes and other organic and metal contaminants associated with the wood-treating process.
- Review of historical drainage pathways around the facility during its period of operation indicates that releases of waste water would have flowed to the northeast/east, away from the site into drainage ditches that are now located in a developed residential area.
- The undeveloped portion of the former facility property is fenced to restrict access.
- Large residential neighborhoods border the Lincoln Creosote facility to the north, northeast, south and west.
- A U.S. Department of Housing and Urban Development (HUD) apartment complex is located immediately north of the facility, and another apartment complex is located to the south. Areas of commercial development are present to the east and west. Areas to the south are separated by a railroad line.

- An Administrative Order on Consent was signed by Joslyn Corporation on October 31, 1995, for implementation of the non-time critical removal action. Implementation of the soil removal activities in the off site areas started in May 1996. The action was completed in October 1996.

Benefits

- Removal of 1 to 2 feet of contaminated soils at homes and apartments eliminated possible exposure to residents.

- Cleanup level for PAHs in a residential scenario of 3.0 ppm total carcinogenic PAHs for the first two feet of depth. The cleanup level for a utility worker scenario from 2 feet in depth to 5 feet in depth of 250 ppm total carcinogenic PAHs.